



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,038	10/20/1999	CHASE A. HAFNER	1668	3569

22193 7590 11/08/2002

QWEST COMMUNICATIONS INTERNATIONAL INC
LAW DEPT INTELLECTUAL PROPERTY GROUP
1801 CALIFORNIA STREET, SUITE 3800
DENVER, CO 80202

EXAMINER

CHAMPAGNE, DONALD

ART UNIT	PAPER NUMBER
----------	--------------

3622

DATE MAILED: 11/08/2002 //

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

MAILED

NOV 08 2002

GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 11

Application Number: 09/421,038
Filing Date: October 20, 1999
Appellant(s): HAFNER ET AL.

Jeremy J. Curcuri, Esq.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 27 September 2002.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: At the first paragraph, the issue is whether claims 1, 10 and 11 are anticipated under 35 USC 102(b) (not 102(e)), and, alternatively, unpatentable under 35 USC 103(a).

(7) *Grouping of Claims*

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because appellant does not explain why the claims of the group are believed to be separately patentable.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

Art Unit: 3622

(9) Prior Art of Record

5,003,584	Benyacar et al.	03-1991
5,915,006	Jagadish et al.	06-1999

(10) Grounds of Rejection

The following ground(s) of rejection, copied verbatim from the final rejection (Paper No. 4 filed 29 March 2002), are applicable to the appealed claims.

1. Applicant's arguments filed 6 March 2002 have been fully considered but they are not persuasive. An explanation is given in para. 11-16 after the following final rejection.
4. Claims 1, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Benyacar et al.
5. Benyacar et al. teaches a method, system and computer readable medium for managing information and rendering discounts in a billing system, the method comprising (col. 10 lines 44-59): receiving a customer record (*AMA record 370*) at billing system 140, where the record includes the data shown in Fig. 3 (col. 7 line 16 to col. 10 line 27); executing the steps of Fig. 2 with the system of Fig. 1 (col. 5 line 41 to col. 7 line 15 and col. 10 lines 28-43), which reads on establishing both a rule-based accumulation engine and a rule-based discount engine; and generating the caller's and sponsor's billing records from the *AMA record*, including rendering discounts applicable to the customer.
6. Benyacar et al. does not teach accumulating the data in a plurality of predetermined target accumulators. However, under the principles of inherency (MPEP § 2112.02), since the reference invention necessarily performs the method claimed, the method claimed is considered to be anticipated by the reference invention. As evidence tending to show inherency, it is noted that the reference teaches (col. 10 lines 44-59) substantially manipulating the data, which inherently entails placing data in computer memory locations, which reads on predetermined target accumulators.

7. Claims 1-4, 6-14 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Jagadish et al.
8. Jagadish et al. teaches (independent claims 1, 10 and 11) a method, system and computer readable medium for managing information and rendering discounts in a billing system, the method comprising: receiving a customer record (*AMA record*) at *billing analysis system 112* (col. line 22); and executing the steps of Fig. 2 with the system of Fig. 1a (col. 4 line 35-49), which reads on establishing both a rule-based accumulation engine and a rule-based discount engine, processing the record and accumulating the data in *SD 113*, in a plurality of computer memory cells, which reads on a plurality of predetermined target accumulators, and rendering discounts applicable to the customer, which reads on processing the plurality of target accumulators with the discount engine to render discounts applicable to the customer.
9. Jagadish et al. also teaches: (claims 2-4, 7, 8, 12-14, 17 and 18) the Fig. 2 series of process steps to be applied based on the number of customer lines, which reads on establishing a rules table to apply at least one rule or function when dictated by the record type, and establishing at least one simple rule for processing the record to evaluate discount application; (claims 6 and 16) adding the number of the telephone line to the record (col. 4 lines 47-54), which reads on assigning a logical name to a source field, where the accumulation engine processes the record using the logical name; and (claims 9 and 19) establishing at least one compound rule composed of simple rules (col. 5 lines 10-23).
10. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being obvious over Jagadish et al. Jagadish et al. does not teach that the rules table directs the accumulation engine to pass data directly to a target accumulator when dictated by the record type. Because the initial purpose of the reference invention is to aggregate all the phone line records for any given customer, it would have been obvious to one of ordinary skill in the art, at the time of the invention, that processing resources could be saved by bypassing this step, and passing the data directly to the target accumulators in *SD 112*, when the customer has only one line.

11. Applicant argued (Paper No. 3 pp. 3 and 4) that both of the relied upon references fail to describe or suggest the specific method claimed for managing information and rendering discounts, comprising a “rule based accumulation engine” and a “rule based discount engine” (claim 1).
12. The crux of the issue is the definition of “rule based accumulation engine” and “rule based discount engine”. The only *generic* guidance in the application is provided in one paragraph at lines 8-15 on p. 2 of the specification. The terms are also described in subsequent paragraphs, but in the context of “a preferred embodiment”.
13. The material provided in the specification does not provide “clear definition” of the terms, as required by MPEP § 2111.01: The specification does not establish the metes and bounds of the terms “rule based accumulation engine” and “rule based discount engine”. A “clear definition” must unambiguously establish what is and what is not included. It is helpful if definitions are gathered in a section labeled definitions, or are preceded by phrases such as “by xxx we mean”; “xxx is defined as”; or “xxx includes, ... but does not include ...”.
14. In the instant case, the examiner is required to give the terms their broadest reasonable interpretation (MPEP § 2111), which the examiner judges to be: first, any engine (processor) which uses some rules to accumulate data “in a plurality of pre-determined target accumulators”, and, second, an engine which processes the plurality of target accumulators “to render discounts applicable to the customer”. That is the definition implied by the one paragraph at lines 8-15 on p. 2 of the specification.
15. As noted in para. 5 and 8 above, the references do teach such engines.
16. Applicant argued (Paper No. 3 p. 4) that the citation (col. 4 lines 47-54) in the rejection of claims 6 and 16 (para. 9 above) merely describes ANI, and “fails to describe the claimed assigning of a logical name to a source field”. The “number of a telephone line” constitutes a logical name, and passing it “to the billing analysis system” reads on its assignment to a source field.

Art Unit: 3622

(11) Response to Argument

As indicated in the final rejection (para. 12-14 of **(10)** above), the crux of the issue is the definition of “rule based accumulation engine” and “rule based discount engine”. The material provided in the specification does not provide “clear definition” of the terms, as required by MPEP § 2111.01: The specification does not establish the metes and bounds of the terms “rule based accumulation engine” and “rule based discount engine”.

As indicated in the final rejection (para. 13):

A “clear definition” must unambiguously establish what is and what is not included. It is helpful if definitions are gathered in a section labeled definitions, or are preceded by phrases such as “by xxx we mean”; “xxx is defined as”; or “xxx includes, ... but does not include ...”. In the instant case, the examiner is required to give the terms their broadest reasonable interpretation (MPEP § 2111).

By failing to meet the “clear definition” requirements of MPEP § 2111.01, appellant has left interpretation to the examiner.

Appellant notes correctly (p. 7, bottom para.) that the terms must be interpreted in view of one of ordinary skill in the art. Examiner believes that he has done that. Examiner found 64 pieces of prior art in the USPAT database that contain the phrase

(rule ADJ based) ADJ3 engine\$1

where the plural of “engine” is included and up to three words may appear between “based” and “engine/s”. Examiner believes that his interpretation of the terms “rule based accumulation engine” and “rule based discount engine” is consistent with this prior art.

Appellant goes on to argue that the limited discussion of the terms cited by the appellant (at the beginning of the last para. on p. 7 of appellant’s brief) should serve as a limitation of the claims. This is an attempt to import claim limitations from the specification. If appellant wanted the claim language to be limited to a specific meaning, appellant only needed to say so by establishing a “clear definition” in the specification.

Both examiner and appellant agree that the terms are explained by the third para. (lines 8-15) of specification p. 2. Appellant now argues that the terms should be further limited

Art Unit: 3622

by the specification discussion of the alleged prior (Background) art (spec. pp. 1-2). Appellant did not file an information disclosure statement or otherwise cite prior art. If the prior art was of central importance to the application, it stands to reason that appellant should have cited prior art. Indeed, had appellant made the present argument before the final rejection, the claims would have been subject to the following enablement rejection under 35 USC 112 first paragraph:

Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Information critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Applicant argues that “rule based accumulation engine” and “rule based discount engine” are defined in part by the prior art, but has cited no prior art.

Examiner judged that the claim limitation to a “rule based accumulation engine” should be interpreted as an engine (processor) which uses some rules to accumulate data “in a plurality of pre-determined target accumulators”, and that the claim limitation to a “rule based discount engine” should be interpreted as an engine which processes the plurality of target accumulators “to render discounts applicable to the customer”. That is the definition implied by the one paragraph at lines 8-15 on p. 2 of the specification.


The remainder of appellant’s argument on pp. 8-11 inclusive relies on appellant’s interpretation of the terms. In essence, appellant alleges (Background, at spec. p. 1 last para.) that the prior art software is “application specific” and “generally not usable by others than the company that the particular package is designed for.” Accordingly (spec. p. 2, first para.), “there is need for a method ... that is more easily modified, and may be ported to different platforms without excessive difficulties.” In the subsequent disclosure of the invention (p. 2 third para.), appellant introduces the rule-based accumulation/discount engines without associating them with the Background discussion. In the brief (p. 8 first para.), appellant provides this association by arguing that those of ordinary skill in the art would know that rule-based systems are non-application specific.

Art Unit: 3622

Appellant's argument against the rejection over Benyacar et al. (p. 8 last para. and p. 9) is essentially that the reference does not explicitly teach non-application specific or "rule based" software. That is correct. However, the advantages of non-application specific software are obvious and "rule-based" software has been mentioned in the literature since at least 1989, so it is very likely that an obviousness rejection of the claims could be constructed, even if appellant's interpretation of "rule based accumulation/discount engine" is accepted.

Appellant's argument against the rejection over Jagadish et al. is similar (p. 10). (Appellant notes that the reference teaches "customer specific parameters", but that is irrelevant since any address is necessarily customer specific.) Here again there is no explicit mention of non-application specific software, but the advantages of such software are obvious. It is very likely that an obviousness rejection of the claims could be constructed, even if appellant's interpretation of "rule based accumulation/discount engine" is accepted.

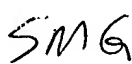
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Eric Stamber
Primary Examiner
Art Unit 3622

Donald L. Champagne
November 7, 2002



Conferees
Stephen M. Gravini



QWEST COMMUNICATIONS INTERNATIONAL INC
LAW DEPT. INTELLECTUAL PROPERTY GROUP
1801 CALIFORNIA STREET, SUITE 3800
DENVER, CO 80202